

AMENDMENTS

IN THE CLAIMS

5 Claims 1-280. (canceled)

281. (currently amended) A method for fabricating a chip package, circuit
~~component~~, comprising:

 joining a ~~preformed~~ die and a ~~preformed~~ substrate using an adhesive material;
10 after said joining said ~~preformed~~ die and said ~~preformed~~ substrate, forming
~~depositing~~ a circuit layer over said ~~preformed~~ die and across an edge of said ~~preformed~~
die; ~~and~~

forming depositing a gold bump over said circuit layer; ~~and~~ -
 after said forming said gold bump over said circuit layer, cutting said substrate.

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282. (currently amended) A method for fabricating a chip package, circuit
~~component~~, comprising:

 joining a ~~preformed~~ die and a ~~preformed~~ substrate using an adhesive material;
 after said joining said ~~preformed~~ die and said ~~preformed~~ substrate, forming an
20 insulating layer comprising a first portion over said ~~preformed~~ die and a second portion
over said ~~preformed~~ substrate but not over said ~~preformed~~ die, wherein said insulating
layer comprises a porous structure; and

 after said forming said insulating layer, cutting separating said ~~preformed~~ substrate-
~~into multiple portions.~~

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283. (currently amended) A method for fabricating a chip package, circuit
~~component~~, comprising:

 joining a ~~preformed~~ die and a ~~preformed~~ substrate using an adhesive material;

after said joining said ~~preformed~~ die and said ~~preformed~~ substrate, forming
~~depositing~~ a circuit layer over said ~~preformed~~ die and across an edge of said ~~preformed~~
die, wherein said forming ~~depositing~~ said circuit layer comprises electroplating, and
wherein said circuit layer comprises at least a part of a passive device; and

5 after said forming ~~depositing~~ said circuit layer, cutting ~~separating~~ said ~~preformed~~
~~substrate into multiple portions~~.

284. (currently amended) A method for fabricating a chip package, circuit
~~component~~, comprising:

10 joining a ~~preformed~~ die and a ~~preformed~~ substrate using an adhesive material,
wherein said ~~preformed~~ die has a top surface at a horizontal level;

after said joining said ~~preformed~~ die and said ~~preformed~~ substrate, forming
~~depositing~~ a waveguide over said horizontal level; and

15 after said forming ~~depositing~~ said waveguide, cutting ~~separating~~ said ~~preformed~~
~~substrate into multiple portions~~.

285. (currently amended) A method for fabricating a chip package, circuit
~~component~~, comprising:

20 joining a ~~preformed~~ die and a ~~preformed~~ substrate using an adhesive material,
wherein said ~~preformed~~ die has a top surface at a horizontal level;

after said joining said ~~preformed~~ die and said ~~preformed~~ substrate, forming
~~depositing~~ a micro electronic mechanical element over said horizontal level; and

25 after said forming ~~depositing~~ said micro electronic mechanical element, cutting
~~separating~~ said ~~preformed~~ substrate ~~into multiple portions~~.

286. (currently amended) A method for fabricating a chip package, circuit
~~component~~, comprising:

joining a ~~preformed~~ die and a ~~preformed~~ substrate using an adhesive material,

wherein said ~~preformed~~ die has a top surface at a horizontal level;

after said joining said ~~preformed~~ die and said ~~preformed~~ substrate, forming
~~depositing~~ a filter over said horizontal level; and

5 after said forming ~~depositing~~ said filter, cutting ~~separating~~ said ~~preformed~~ substrate-
into multiple portions.

287. (currently amended) The method of Claim 281 further comprising forming a
polymer layer comprising a first portion over said ~~preformed~~ die and a second portion
over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said forming
10 ~~depositing~~ said circuit layer over said polymer layer.

288. (previously presented) The method of Claim 287, wherein said forming said
polymer layer comprises curing.

15 289. (previously presented) The method of Claim 287, wherein said forming said
polymer layer comprises grinding.

290. (previously presented) The method of Claim 287, wherein said forming said
polymer layer comprises etching.

20 291. (currently amended) The method of Claim 281 further comprising forming a
polymer layer over said circuit layer, followed by said forming ~~depositing~~ said gold
bump.

25 292. (currently amended) The method of Claim 281, wherein said forming
~~depositing~~ said circuit layer comprises electroplating.

293. (currently amended) The method of Claim 281, wherein said forming
~~depositing~~ said circuit layer comprises electroless-plating.

294. (currently amended) The method of Claim 281, wherein said forming
5 ~~depositing~~ said circuit layer comprises sputtering.

295. (currently amended) The method of Claim 281 further comprising forming a
polymer layer over said ~~preformed~~ substrate and surrounding said ~~preformed~~ die,
followed by said forming ~~depositing~~ said circuit layer over said ~~preformed~~ die and over
10 said polymer layer.

296. (previously presented) The method of Claim 295, wherein said forming said
polymer layer comprises curing.

15 297. (previously presented) The method of Claim 295, wherein said forming said
polymer layer comprises grinding.

298. (previously presented) The method of Claim 295, wherein said forming said
polymer layer comprises etching.
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299. (currently amended) The method of Claim 281, wherein said cutting said
substrate comprises a laser cutting process. ~~joining said preformed die and said~~
~~preformed substrate comprises using a conductive paste.~~

25 300. (currently amended) The method of Claim 281, wherein said cutting said
substrate comprises a mechanical cutting process. ~~after said depositing said gold bump,~~
~~further comprising separating said preformed substrate into multiple portions.~~

301. (currently amended) The method of Claim 282, after said forming said insulating layer, further comprising forming ~~depositing~~ a circuit layer over said insulating layer, followed by said cutting ~~separating~~ said ~~preformed~~ substrate.

5 302. (currently amended) The method of Claim 301, wherein said forming ~~depositing~~ said circuit layer comprises electroplating.

303. (currently amended) The method of Claim 301, wherein said forming ~~depositing~~ said circuit layer comprises electroless-plating.

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304. (currently amended) The method of Claim 301, wherein said forming ~~depositing~~ said circuit layer comprises sputtering.

305. (currently amended) The method of Claim 282, after said joining said
15 ~~preformed~~ die and said ~~preformed~~ substrate, further comprising forming ~~depositing~~ a circuit layer over said ~~preformed~~ die and across an edge of said ~~preformed~~ die, followed by said forming said insulating layer over said circuit layer.

306. (currently amended) The method of Claim 305, wherein said forming ~~depositing~~
20 said circuit layer comprises electroplating.

307. (currently amended) The method of Claim 305, wherein said forming ~~depositing~~ said circuit layer comprises electroless-plating.

25 308. (currently amended) The method of Claim 305, wherein said forming ~~depositing~~ said circuit layer comprises sputtering.

309. (currently amended) The method of Claim 282, after said joining said
~~preformed~~-die and said ~~preformed~~-substrate, further comprising forming a polymer layer
over said ~~preformed~~-substrate and surrounding said ~~preformed~~-die, followed by said
forming said insulating layer comprising said first portion over said ~~preformed~~-die and
5 said second portion over said polymer layer.

310. (previously presented) The method of Claim 309, wherein said forming said
polymer layer comprises curing.

10 311. (previously presented) The method of Claim 309, wherein said forming said
polymer layer comprises grinding.

312. (previously presented) The method of Claim 309, wherein said forming said
polymer layer comprises etching.
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313. (currently amended) The method of Claim 282, wherein said cutting said
substrate comprises a mechanical cutting process. ~~said joining said preformed die and~~
~~said preformed substrate comprises using a conductive paste.~~

20 314. (previously presented) The method of Claim 282, wherein said forming said
insulating layer comprises curing.

315. (previously presented) The method of Claim 282, wherein said forming said
insulating layer comprises grinding.
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316. (previously presented) The method of Claim 282, wherein said forming said
insulating layer comprises etching.

317. (currently amended) The method of Claim 282, after said forming said insulating layer, further comprising forming ~~depositing~~ a passive device over said insulating layer.

5 318. (currently amended) The method of Claim 282, after said forming said insulating layer, further comprising forming ~~depositing~~ a solder bump over said insulating layer.

10 319. (currently amended) The method of Claim 282, after said forming said insulating layer, further comprising forming ~~depositing~~ a gold bump over said insulating layer.

15 320. (currently amended) The method of Claim 283 further comprising forming a polymer layer comprising a first portion over said ~~preformed~~ die and a second portion over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said forming ~~depositing~~ said circuit layer over said polymer layer.

20 321. (previously presented) The method of Claim 320, wherein said forming said polymer layer comprises curing.

322. (previously presented) The method of Claim 320, wherein said forming said polymer layer comprises grinding.

25 323. (previously presented) The method of Claim 320, wherein said forming said polymer layer comprises etching.

324. (currently amended) The method of Claim 283 further comprising forming a polymer layer over said circuit layer, followed by said cutting ~~separating~~ said ~~preformed~~ substrate.

5 325. (currently amended) The method of Claim 283 further comprising forming a polymer layer over said ~~preformed~~ substrate and surrounding said ~~preformed~~ die, followed by said forming ~~depositing~~ said circuit layer over said die and over said polymer layer. ~~having said first portion over said preformed die and said second portion over said polymer layer but not over said preformed die.~~

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326. (previously presented) The method of Claim 325, wherein said forming said polymer layer comprises curing.

15 327. (previously presented) The method of Claim 325, wherein said forming said polymer layer comprises grinding.

328. (previously presented) The method of Claim 325, wherein said forming said polymer layer comprises etching.

20 329. (currently amended) The method of Claim 283, wherein said cutting said substrate comprises a mechanical cutting process. ~~said joining said preformed die and said preformed substrate comprises using a conductive paste.~~

25 330. (currently amended) The method of Claim 283, after said forming ~~depositing~~ said circuit layer, further comprising forming ~~depositing~~ a solder bump over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said cutting ~~separating~~ said ~~preformed~~ substrate.

331. (currently amended) The method of Claim 283, after said forming depositing said circuit layer, further comprising forming depositing a gold bump over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said cutting separating said ~~preformed~~ substrate.

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332. (previously presented) The method of Claim 283, wherein said passive device comprises a resistor.

333. (previously presented) The method of Claim 283, wherein said passive device
10 comprises a capacitor.

334. (previously presented) The method of Claim 283, wherein said passive device comprises an inductor.

15 335. (currently amended) The method of Claim 284 further comprising forming a polymer layer comprising a first portion over said ~~preformed~~ die and a second portion over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said forming depositing said waveguide over said polymer layer.

20 336. (previously presented) The method of Claim 335, wherein said forming said polymer layer comprises curing.

337. (previously presented) The method of Claim 335, wherein said forming said polymer layer comprises grinding.

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338. (previously presented) The method of Claim 335, wherein said forming said polymer layer comprises etching.

339. (currently amended) The method of Claim 284 further comprising forming a polymer layer over said waveguide, followed by said cutting ~~separating~~ said ~~preformed~~ substrate.

5 340. (currently amended) The method of Claim 284 further comprising forming a polymer layer over said ~~preformed~~ substrate and surrounding said ~~preformed~~ die, followed by said forming ~~depositing~~ said waveguide over said polymer layer.

10 341. (previously presented) The method of Claim 340, wherein said forming said polymer layer comprises curing.

342. (previously presented) The method of Claim 340, wherein said forming said polymer layer comprises grinding.

15 343. (previously presented) The method of Claim 340, wherein said forming said polymer layer comprises etching.

20 344. (currently amended) The method of Claim 284, wherein said cutting said substrate comprises a mechanical cutting process. ~~said joining said preformed die and said preformed substrate comprises using a conductive paste.~~

25 345. (currently amended) The method of Claim 284, after said forming ~~depositing~~ said waveguide, further comprising forming ~~depositing~~ a solder bump over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said cutting ~~separating~~ said ~~preformed~~ substrate.

346. (currently amended) The method of Claim 284, after said forming ~~depositing~~ said waveguide, further comprising forming ~~depositing~~ a gold bump over said ~~preformed~~

substrate but not over said ~~preformed~~ die, followed by said cutting ~~separating~~ said ~~preformed~~ substrate.

347. (currently amended) The method of Claim 285 further comprising forming a
5 polymer layer comprising a first portion over said ~~preformed~~ die and a second portion
over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said forming
~~depositing~~ said micro electronic mechanical element over said polymer layer.

348. (previously presented) The method of Claim 347, wherein said forming said
10 polymer layer comprises curing.

349. (previously presented) The method of Claim 347, wherein said forming said
polymer layer comprises grinding.

15 350. (previously presented) The method of Claim 347, wherein said forming said
polymer layer comprises etching.

351. (currently amended) The method of Claim 285 further comprising forming a
polymer layer over said micro electronic mechanical element, followed by said cutting
20 ~~separating~~ said ~~preformed~~ substrate.

352. (currently amended) The method of Claim 285 further comprising forming a
polymer layer over said ~~preformed~~ substrate and surrounding said ~~preformed~~ die,
followed by said forming ~~depositing~~ said micro electronic mechanical element over said
25 polymer layer.

353. (previously presented) The method of Claim 352, wherein said forming said
polymer layer comprises curing.

354. (previously presented) The method of Claim 352, wherein said forming said polymer layer comprises grinding.

5 355. (previously presented) The method of Claim 352, wherein said forming said polymer layer comprises etching.

356. (currently amended) The method of Claim 285, wherein said cutting said
substrate comprises a mechanical cutting process. ~~said joining said preformed die and~~
10 ~~said preformed substrate comprises using a conductive paste.~~

357. (currently amended) The method of Claim 285, after said forming depositing
said micro electronic mechanical element, further comprising forming depositing a solder
bump over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said
15 cutting separating said ~~preformed~~ substrate.

358. (currently amended) The method of Claim 285, after said forming depositing
said micro electronic mechanical element, further comprising forming depositing a gold
bump over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said
20 cutting separating said ~~preformed~~ substrate.

359. (currently amended) The method of Claim 286 further comprising forming a
polymer layer comprising a first portion over said ~~preformed~~ die and a second portion
over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said forming
25 depositing said filter over said polymer layer.

360. (previously presented) The method of Claim 359, wherein said forming said polymer layer comprises curing.

361. (previously presented) The method of Claim 359, wherein said forming said polymer layer comprises grinding.

5 362. (previously presented) The method of Claim 359, wherein said forming said polymer layer comprises etching.

363. (currently amended) The method of Claim 286 further comprising forming a polymer layer over said filter, followed by said cutting ~~separating~~ said ~~preformed~~
10 substrate.

364. (currently amended) The method of Claim 286 further comprising forming a polymer layer over said ~~preformed~~ substrate and surrounding said ~~preformed~~ die, followed by said forming ~~depositing~~ said filter over said polymer layer.

15 365. (previously presented) The method of Claim 364, wherein said forming said polymer layer comprises curing.

366. (previously presented) The method of Claim 364, wherein said forming said
20 polymer layer comprises grinding.

367. (previously presented) The method of Claim 364, wherein said forming said polymer layer comprises etching.

25 368. (currently amended) The method of Claim 286, wherein said cutting said substrate comprises a mechanical cutting process. ~~said joining said preformed die and said preformed substrate comprises using a conductive paste.~~

369. (currently amended) The method of Claim 286, after said forming ~~depositing~~ said filter, further comprising forming ~~depositing~~ a solder bump over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said cutting ~~separating~~ said ~~preformed~~ substrate.

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370. (currently amended) The method of Claim 286, after said forming ~~depositing~~ said filter, further comprising forming ~~depositing~~ a gold bump over said ~~preformed~~ substrate but not over said ~~preformed~~ die, followed by said cutting ~~separating~~ said ~~preformed~~ substrate.

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